

COURSE CRITIQUE

Please rate 1-10 (poor to excellent respectively) by placing a check on the scale given. Comment below question where indicated. Use back of pages if needed.

FORM

RATING

1. Format of the course was intended to accommodate to a rough 5% time commitment and to provide for a full-day class treatment of a particular topical area. Please rate:

1 day/month	1	5	10
4 hours/every 2 weeks	1	5	10

Other Alternatives:

2. The point of the applications session was to illustrate where current course material was utilized in the real world. Please rate effectiveness:

Material relevance	1	5	10
Applications speakers present actions	1	5	10

3. The purpose of the homework was to exercise topical material with about 4 hours of work. Please rate these:

3 one-hour problems	1	5	10
20 ten-minute problems	1	5	10

4. A possible alternative is available in giving a "keep-alive" exercise in the topical area. Please rate these alternatives for continuity (this would be a short session of 1 hour scheduled between the bi-weekly classes):

Problem-solving session	1	5	10
Second applications session	1	5	10

5. The class was intended to be weighted towards a blackboard-pictorial development in order to convey modelling concepts more readily. Please rate effectiveness of alternatives:

Diagrammatic presentation	1	5	10
---------------------------	---	---	----

Mix of vuegraphs & chalkboard	1	5	10
-------------------------------	---	---	----

6. The symbology of various systems disciplines is confusing due to the separate source developments. An effort at consistency was made in order to permit cross interpretation within the technical literature. Please rate effectiveness:

Common symbology	1	5	10
------------------	---	---	----

Example illustrations	1	5	10
-----------------------	---	---	----

7. The intent of notes and handout material furnished throughout the month was to tie course topics to technical literature. Please rate:

Effectiveness of hand-out reprints	1	5	10
------------------------------------	---	---	----

Effectiveness of specially developed handouts	1	5	10
---	---	---	----

8. General impedimenta such as same room same day/month, same format, etc., for providing continuity. Please rate:

Room	1	5	10
------	---	---	----

Day	1	5	10
-----	---	---	----

Daily sequence	1	5	10
----------------	---	---	----

Would you prefer a roundtable seminar format?	1	5	10
---	---	---	----

9. The course was designed to present a semi-unitary approach to several disciplines. Please rate applicable areas 1-10:

Communications	<u>7</u>	Optics	<u>7</u>	Acoustics	<u>7</u>
Hum. Eng. & Biomed.	<u>7</u>	Seismics	<u>7</u>	Pictorial	<u>7</u>
Computer Technology	<u>7</u>				

SUBSTANCE

10. The course material is split 50% basic math tools and 50% in commonality subsystems. (Those subsystems which are pervasive in designs across disciplines.) The sequence was that recommended by ASEE for match modelling related to several fields. Please rate:

Balance of material	1	<u>5</u>	<u>✓</u>	10
Total content	1	<u>5</u>	<u>✓</u>	10

The sequence is given below for each session. Please give your rating for both material content and for the applications given both formally and in the course of concept development.

11. Session I; Vectorial Representation; matrices, num. analysis, linear systems, sampling, manipulation:

Material	1	<u>5</u>	<u>✓</u>	10
Application	1	<u>5</u>	<u>✓</u>	10

12. Session II; Transforms; convolution, Fourier and Laplace transformations, Z transforms, impulse response, numerical analysis:

Material	1	<u>5</u>	<u>✓</u>	10
Application	1	<u>✓</u>	<u>5</u>	10

13. Session III; Probability and Statistics; random var., expectancy, density functions, distributions, confidence limits:

Material	1	<u>5</u>	<u>✓</u>	10
Application	1	<u>5</u>	<u>✓</u>	10

14. Session IV; Stochastic Variable; stationarity, ergodicity, moments, correlation, power spectral density, white noise, square law detection:

Material
Application

1 5 10
1 5 10

15. Session V; Signal Detection; value, cost likelihood ratio detection, Bayes Law:

Material
Application

1 5 10
1 5 10

16. Session VI; Detector Subsystems I; receiver operating characteristics, detection situations, S/N ratio, data smoothing and prediction:

Material
Application

1 5 10
1 5 10

Much of the methodology presented is not particularly applicable to my present position in the Staff Communications Division, however some of the techniques should be useful in my future assignments in other components of OC. Of obvious benefit to communications specialists are applications to detection, arrays, & time/frequency/space transformations.

I have mixed feelings about the homework. Obviously more "pressure" to exercise the methodology through homework would be beneficial to the student's grasp of the concepts involved. On the other hand, since I'm taking evening courses in "the systems approach" at A.U., I frankly assign higher precedence to studying for these formal academic courses.

The commonality of the techniques to a wide variety of application areas is probably the most important concept I have derived